

IN THE CLAIMS

1 1 (amended). A water sanitizing apparatus comprising:

2 a body containing a series of vertical, water-carrying tubes circularly
3 arranged around a hollow central region,

4 a base for said body,

5 a top cap for said body, said base and said top cap configured to
6 channel a flow of water through said water-carrying tubes so that said flow of
7 water flow is alternately upward and downward through said water-carrying
8 tubes, with a last of said tubes channeling said flow of water into said hollow
9 central region,

10 a bubble separator in said hollow central region,

11 an ozone generator in said hollow central region, A

12 a mixing device coupled to provide ozone from said ozone generator to
13 said flow of water.

1 2. (newly added). A water sanitizing apparatus as set forth in claim 1 wherein
2 said mixing device is a venturi incorporated in said base.

1 3 (newly added). A water sanitizing apparatus as set forth in claim 1 wherein
2 said ozone generator further comprises:

3 an ultraviolet light transparent enclosure extending into said flow of
4 water in said hollow central region,

5 an ultraviolet lamp in said ultraviolet light-transparent enclosure,

6 an air inlet into said ultraviolet light-transparent enclosure,
7 an air/ozone outlet from said ultraviolet light-transparent enclosure,
8 said air/ozone outlet coupled to said mixing device,
9 whereby air and ozone is provided to said mixing device where said air
10 and ozone is mixed into said flow of water, with a mixture of said air, ozone and
11 water being exposed to ultraviolet light in said hollow central region.

1 4 (newly added). A water sanitizing apparatus as set forth in claim 3 wherein
2 said ultraviolet light transparent enclosure is transparent to wavelengths of
3 ultraviolet light of about 254 nm.

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1 5 (newly added). A water sanitizing apparatus as set forth in claim 3 wherein
2 said air inlet further comprises a tube extending into said ultraviolet light
3 transparent enclosure to a point near an end of said tube so that air from said
4 air inlet is moved the length of said ultraviolet lamp to said air/ozone outlet.

1 6 (newly added). A water sanitizing apparatus as set forth in claim 5 wherein
2 said bubble separator further comprises a valve coupled to said air inlet and to
3 an interior of said hollow central region, said valve responsive to a water level
4 in said hollow central region so that when said water level rises to a
5 predetermined level, said valve is opened to admit gasses in said hollow central
6 region into said ultraviolet light transparent enclosure.

1 7 (newly added). An assembly for purifying water as set forth in claim 1
2 wherein said body is an extrusion that may be cut to length for any particular
3 application.

1 8 (newly added). An assembly as set forth in claim 7 wherein said body further
2 comprises at least one elongated tubular dry region within which electrical
3 components for said assembly are located.

1 9 (newly added). An assembly for purifying water for spas, hot tubs,
2 swimming pools and the like comprising:

3 an extruded body having a plurality of vertical, elongated water-
4 carrying channels,

5 a top cap and a base for said body, said top cap and said base
6 cooperating between a water inlet and a water outlet to develop a water flow
7 through said water-carrying channels that alternates in upward and downward
8 directions between adjacent said water-carrying channels,

9 An ozone generator mounted in a last of said water-carrying channels,

10 a bubble separator mounted in said last of said water carrying
11 channels,

12 a mixing device mounted in said water inlet to receive said water flow,
13 and coupled to said ozone generator for mixing at least ozone in said water
14 flow.

1 10 (newly added). An assembly for purifying water as set forth in claim 9
2 wherein said mixing device is a venturi constructed as a pair of inserts and a
3 central disc mounted in a bore of said water inlet, said pair of inserts and said
4 disc being interchangeable with other inserts and discs to change operational
5 characteristics of said venturi.

1 11 (newly added). An assembly for purifying water as set forth in claim 10
2 wherein said ozone generator further comprises:

3 an ultraviolet transparent enclosure in said water flow,
4 an ultraviolet lamp producing ultraviolet light at wavelengths of 185
5 nm and 254 nm, said lamp sealably mounted in said enclosure,
6 an air inlet and an air outlet each coupled to an interior of said
7 enclosure.

1 12 (newly added). An assembly for purifying water as set forth in claim 11
2 wherein said ultraviolet transparent enclosure is transparent only to said
3 ultraviolet light of a wavelength of 254 nm for disassociating ozone in said
4 water flow and for killing microbiota in said flow of water.

1 13 (newly added). An assembly for purifying water as set forth in claim 12
2 wherein said bubble separator further comprises a valve having an inlet
3 coupled to receive gasses in said bubble separator, and an outlet coupled to
4 provide said gasses to said ozone generator, said valve responsive to a water

5 level in said last of said water carrying channels rising to a predetermined level.

1 14 (newly added). An assembly for purifying water as set forth in claim 13
2 wherein said predetermined level of said water level is determined by a float.

1 15 (newly added). An assembly for purifying water as set forth in claim 12
2 wherein said water level in said last of said water carrying channels partially
3 submerges said ultraviolet transparent enclosure so that both water and
4 gasses in said last of said water carrying channels receive said ultraviolet light
5 of a wavelength of 254 nm.